



## Qur'ani Paradigm in Professional Development of Mathematics Teacher

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Keywords	Abstract
Professional Teachers, Learning Mathematics, Al-Qur'an Paradigm	Lack of understanding of the concept of the Qur'anic Paradigm: Many math teachers may not fully understand the concepts and principles of the Qur'anic Paradigm. This can cause difficulties in integrating Islamic values into the curriculum and learning process. This study aims to find out how the concept and form of professionalism of Mathematics teachers in mathematics learning by studying the content of the Qur'an. The context of mathematics teachers in this article is an important highlight because Mathematics is a universal science that can be used as an axis in the process of taqarrub ilallah and as a means of worshiping Allah SWT. The method used in this research was literature review by reviewing and collecting data sources that became research references. There were two sources of data used in this study, namely primary data sources and secondary data sources. The verses of the Qur'an studied were primary data sources which were then supported by secondary data sources in the form of scientific articles and other written works. As a source of knowledge and guidance for humans, it includes also being a guide for Mathematics teachers to know how to best transfer knowledge and improve their professionalism. The results of the analysis of the data obtained in this study are in the form of the implied message of the Qur'an to a teacher who is obliged to convey his knowledge to those who have the right to receive it (students) by having words, actions, and a gentle heart, always showing a truth, and put forward deliberation with students and fellow teachers in determining the direction of learning.

### INTRODUCTION

Education is an important thing that must be fought for by every individual. According to Maharani, et.al. (2021) education can be stated as a way for someone to manifest hope and to reach goals for the sake of life sustainability. This shows that the advance and success of a country are also determined by the success or failure of education applied in it, until the country has obligation to give education right to all of its people. In Islamic perspective, education can play the role as the bridge to do taqarrub ilallah (getting closer to Allah God Almighty) and also to worship Allah God Almighty because the sources of science existed in education comes from Al-Qur'an which is Kalamullah (The Saying of Allah).

The Law of National Education System Number 20 Year 2003 Article 3 mentioned that National Education functions to develop the ability and form the character of a dignified nation civilization in order to educate the nation life aiming develop the students' potential so that they become faithful human to The One Almighty God, owning noble character, healthy, knowledgeable, competent, creative, independent, and becoming a democratic

and responsible citizen.

Teacher is one of important parts in the learning process who has big responsibility in guiding the students towards the education direction (Harta & Utami, 2022). It is because education is a dynamic cultural transition towards sustainable change, as the main target in building the human civilization and culture. Teacher is not an easy job. Teacher's profession is full of dynamics and challenges of life. Teacher is one of the most strategic education components. It is said so because in the learning process if there is no teacher who takes the role as educator then the learning cannot occur.

Mathematics is an importantly exact science to be learned. One of Mathematics essence is its abstract trait. Therefore, a teacher must be capable of nurturing Mathematics concept well and suitably so that students can build their reasoning ability logically, systematically, consistently, critically, and disciplinely. Neubauer (2019) stated that in Mathematics learning, the students will get used to gain understanding through the experiences about the traits owned and not owned by a group of object. From that, we can see that in Mathematics learning the students will understand more

what is learned by making an object as a media or example, until the teacher must control and give the form of teaching which is in line with the students' need.

One form of Al-Qur'an implementation on the importance of practicing the knowledge and realize that science owned is given by Allah God Almighty through learning Mathematics for the sake of *taqarrub ilallah*. One of the ways is by implementing Mathematics learning from, for, to, and with Al-Qur'an (Mansur & Kenedi, 2017). Al-Qur'an as the source of science certainly contains the answer on the questions about anything which is still unknown. In it we can find various clues especially about science and knowledge. Even though sometimes not directly in the form of a specific knowledge, but by reading Al-Qur'an certainly we will gain ideas to find certain knowledge and technology that we need (Anwar & Elfiah, 2019).

Teacher as the exemplar and leader in a scope of learning should be able to practice all forms of deeds that clearly will bring benefit for other people, especially to their students (Northouse, 2021; Djibu & Ishofwan, 2019). Based on that statement, we know that the duty and function of a teacher is important to make changes on students towards better direction. One of the ways is by giving example or deed that can be made as exemplar by students to be implemented in their daily life.

In general, the learning in Indonesia is implemented face to face and formally at school. Teachers deliver their material by using various methods which enable and ease the students to understand the materials. However, it has been one year and a half the learning process implemented at school changed, namely conducted online. Thereby the ability of education practitioner in using and utilizing technology development is required.

Teachers' professionalism does not only cover professionalism itself in educating, guiding, teaching, and assessing, but also conducting competence development sustainably which covers self development, scientific publication, and innovative work (Kulsum & Muhid, 2022). Seeing the condition of education in Indonesia which experiences many changes in pandemic era, especially in the process of its learning implementation, then the form of teachers' professionalism is different too. In this article, we will find out how is the form of Mathematics teacher professionalism in online learning era by reviewing the concepts contained in Al-Qur'an.

## METHOD

This research was a literature study in which its data collection was by collecting and identifying the sources related to the topic namely professionalism of a teacher. There were two data sources used in this research namely primary data and secondary data. The source of primary data became the thorough reference in this research namely Al-Qur'an Surah Ali Imran Verse 159 that was reviewed and correlated to The Law about teacher professionalism as obtained in The Law of Teacher and Lecturer Number 74 Year 2008. While the source of secondary data was as the supporter of main data obtained by studying several articles published in the form of scientific journal, article of proceeding seminar, electronic books (e-books), and other scientific works which had clarity in its author's source.

After the data were collected then the next stage was the process of data analysis aiming to gain the result and discussion of the research topic. The data analysis stage conducted was in the form of data reduction namely by selecting, focusing, and transforming the raw data into the form of simple notes. After the result of raw data recording, then theoretical data review and display were conducted to support the study result until after the data reduction was done the author could arrange the conclusion or taking the conclusion.

## RESULT AND DISCUSSION

### Education in Islamic Perspective

Education as the right of every state citizen must have the function to develop human potential from all aspects. According to Tan (2014) not only intelligence is targeted in education let alone success from material aspect, but also how education process could guide human to become a complete human namely perfect and noble human.

Islamic education is a conscious effort which systematically encourages the occurrence of learning process and individual adjustment continuously on cultural values and community goals based on Islamic values (Ahmed, 2012). Based on this statement, we know that every form of adjustment carried out by an individual in order to improve themselves or gain beneficial knowledge and conducted on the basis of Islamic values is the true definition of education if seen from Islamic point of view. Until in order to conduct a learning which is suitable with Islamic perspective, it must be implemented directly in the process of cultural values development which certainly is not in the contrary with

Islam.

In Islam, education is a central thing which in it containing the activity of giving and receiving knowledge based on the effort to seek the blessing of Allah and as the facility to get closer to Allah God Almighty. According to Daulay (2020) the function of education based on Islamic point of view is to change natural development to be directed development. In other words, changing the orientation which initially only focus on worldly life to ukhrawi (afterlife) life encouraged by various form of good deeds based on the willingness and consciousness of the doer.

Based on the explanation above, it can be understood that Islamic education is a process of self development guidance which covers cognitive aspect, physical aspect, and heart in order to guide an Islamic personality by transforming and internalizing Islamic values, so that human could live as they should to run their duty on earth to worship God and as a khalifah (leader) Tambak & Amril, (2021). Carrying out an Islamic education is one form of our gratitude towards Allah who has given us brain which then could be developed as the tool to explore His creation.

### **Mathematics Learning With Qur'anic Paradigm**

Mathematics as one of science which is the result of human mindset development is a central science for daily life. Even unwittingly everyone in their daily must involve Mathematics in every aspect of activity. However many people consider that Mathematics is a difficult and complicated learning material to learn and it becomes the burden. As a science which cannot stand alone, Mathematics in its role as human aids can be used to solve the problem in life which certainly requires other disciplines of science. This is in accordance with the purpose of Mathematics namely to develop the ability of problem solving, communication skill, and reasoning ability where goal achievement will be maximized by involving other disciplines of science which has parallel field.

According to Saputri & Muchtarom (2017) Mathematics learning with Qur'anic paradigm could develop 4 (four) thinking skills needed to live in global era namely critical thinking, creative thinking, collaborative thinking, and communicative thinking (4Cs). This is needed to be done so that students can develop their thought and explore their ability in their self development because Mathematics grows and develop

based on the process of thingking until by developing 4Cs in Mathematics learning process certainly will be easier compared to other learning.

Karlik (2018) stated that Mathematics is a symbolic language and its main feature is the usage of inductive reasoning. In Al-Qur'an, there are many verses which discuss about Mathematics one of which is Surah Yunus Verse 5 which has the meaning as follows:

*"He is the One Who made the sun a radiant source and the moon a reflected light, with precisely ordained phases, so that you may know the number of years and calculation 'of time'. Allah did not create all this except for a purpose. He makes the signs clear for people of knowledge."*

Based on Qur'an Surah Yunus Verse 5 above, Allah God Almighty instructed human to learn numbers and calculation. As we know that numbers and calculation are parts of Mathematics. This verse also explains about the determination of time for prayer, beginning of the month, beginning of the year, making, even qibla direction precisely and accurately need Mathematics help. These are real evidence that Islam strongly recommend to learn Mathematics even though it is an indirect message. By learning Mathematics, we will gain many benefits one of which is adding the knowledge about counting knowledge and could develop thinking skill of everyone who learns it.

The rapid development of technology and science nowadays is because of Mathematics support in its structure and reasoning. Science and technology which is usually called as IPTEK (in Indonesian term) in to date era can create prosperity and give ease in every aspect of human life, included the learning process especially Mathematics learning. The form of Qur'anic Mathematics learning based on IPTEK is by utilizing various up to date technology development, one of which is online learning since the spread of Covid-19 in Indonesia in the early of 2020.

In its implementation the teachers and students need the ability to use application which can connect in teaching and learning activity. The form of learning like this actually has existed since long time ago taught by our prophets, one of which is as mentioned in Al-Qur'an the story of hud-hud bird which can give news about Saba country to Prophet Sulaiman through the letter that it brought (Faishol & Mashuri, 2022).

### **Al-Qur'an Spirit for Professionalism Development of Mathematics Teacher**

As explained in The Law Number 14 Year 2005 about Teacher and Lecturer Paragraph 1

Verse 1 that teacher is a professional educator with main duties to educate, teach, guide, direct, train, assess, and evaluate students in early childhood education, formal education path, primary education, and middle education (Gove & Cyelich, 2011).

Teachers have pivotal role in Islamic education, especially in the learning process because a teacher is responsible for determining the direction of teaching and learning process. Therefore, as an education practitioner it is compulsory for teachers to know their function and duties in educational process.

Guidance and direction from a teacher are one requirement that we must fulfill if we want to gain science. Without the guidance and direction from teachers, it is impossible for us to gain the true and beneficial knowledge. Ali bin Abi Thalib RA said: *“Know that you will not gain knowledge unless with six capitals, namely: smart, spirit, patience, owning provision, direction and guidance from teachers, and long time.”* (Krauss, 2022).

Teachers suppose to guide students actualizing learning material in real life, as if giving guidance that study on various natural phenomenon enables human to have the power to penetrate space and human will not be able to do so unless with power (Young, 2010).

One of Qur'an verses which shows a teacher's professionalism is Surah Ali Imran Verse 159. It is mentioned implicitly that Allah God Almighty conveyed that importance of a teacher to have attitude which becomes the commitment to increase their ability by continuously develop the strategies that will be used in doing their job as an educator.

فَبِمَا رَحْمَةٍ مِّنَ اللَّهِ لِنْتَ لَهُمْ ۚ وَلَوْ كُنْتَ فَظًّا غَلِيظَ الْقَلْبِ لَانْفَضُّوا مِنْ حَوْلِكَ فَاعْفُ عَنْهُمْ وَاسْتَغْفِرْ لَهُمْ وَشَاوِرْهُمْ فِي الْأَمْرِ فَإِذَا عَزَمْتَ فَتَوَكَّلْ عَلَى اللَّهِ ۚ إِنَّ اللَّهَ يُحِبُّ الْمُتَوَكِّلِينَ (١٥٩)

*“It is out of Allah's mercy that you 'O Prophet' have been lenient with them. Had you been cruel or hard-hearted, they would have certainly abandoned you. So pardon them, ask Allah's forgiveness for them, and consult with them in 'conducting' matters. Once you make a decision, put your trust in Allah. Surely Allah loves those who trust in Him.”* (QS. Ali Imran: 159 in Aldulaimi, 2016)

From the verse above we know that Allah God Almighty has bestowed His grace to us as His creation. Grace from Allah is in the form of love which only us who can feel it without the ability to measure it. Until we also need to behave gentle towards fellow

creatures. In the role as a teacher, we suppose to practice what has been instructed by Allah as contained in one of His verse namely to behave gentle and full of love towards students without differing them based on their background. According to Xie & Derakhsahan (2021), gentle attitude done by teacher is a psychological touch which can raise students' spirit to recognize and optimize their potential. It is one form of teachers' professionalism which can be applied during face to face learning or online learning.

In that verse, Allah God Almighty also said that He will distance us from terrible things, until by doing so teachers' professionalism can also be improved through teachers' care on their students, namely by conducting monitoring and protection on bad things which could put students in danger.

As one of examples in online learning namely the teacher can work together with students' parents to monitor and control students' activity in using electronic devices so that students do not misuse it for bad things. The Government Regulation (PP) Number 74 Year 2008 mentioned that teachers must be capable of communicate orally and by gesture politely; using Information and Communication Technology (ICT) functionally; get along effectively with students and peer teachers, educational staffs, leader of an education unit, parents or guardians of the students; get along politely with the surrounding community by considering the norm and prevailing values; and applying the true fraternal principle and spirit of togetherness.

Another form of teachers' professionalism which can be found out after reviewing Al-Qur'an Surah Ali Imran Verse 159 is possessing forgiving soul and begging for mercy for each other to Allah for all forms of negligence done by them or their students, until by doing so will teach and nurture positive attitude to their students. Besides, teachers also suppose to do discussion with the students to generate the best decision which will be done in the learning process.

According to Kobayashi (1999) the word *wasyaawirhum* is an imperative form (*amr*) which must produce the best thing as contained in the basic meaning of that word namely issuing honey from its den. An example of discussion in teacher and students context is determining or agreeing on the application which will be used in the learning process, the method which will be conducted and another agreement which certainly could be run together when the teaching and learning process take place.

A professional teacher also should be capable of teaching their students to always surrender to Allah over everything, when determined to do good things then must be ready to receive the consequences in any form. When it is already based on the intention to surrender to Allah then any consequence will occur on them and they will accept it sincerely and gracefully, until they are getting closer and closer to Allah God Almighty.

## CONCLUSION

The Mathematics teacher professionalism in online learning is not that different from their professionalism in face to face learning. The review of teachers' professionalism in Al-Qur'an Surah Ali Imran Verse 159 shows that the forms of teachers' professionalism are possessing gentle utterance, deed, and heart towards their students, always showing the truth and keeping students far away from all bad things, always pray for goodness, discussing with the students in determining something for the sake of better learning process, and teaching surrender attitude towards Allah in order to nurture positive traits in the teachers themselves or the students.

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